

104 SCOPE OF WORK

104.01 INTENT OF CONTRACT

The intent of the contract is to provide for the construction and completion in every detail of the work described. The Contractor shall furnish all labor, materials, equipment, tools, transportation, and supplies required to complete the work in accordance with the plans, specifications and terms of the contract.

104.02 MAINTENANCE OF TRAFFIC

Unless otherwise specified in the contract documents, the roadway, while undergoing improvements shall be kept open to traffic by the Contractor. The Contractor shall keep the portion of the project being used by the public in such condition that the traffic will be adequately protected and accommodated and the roadway smooth and free of potholes. Snow removal will not be required of the Contractor. The Contractor shall provide, erect, maintain and remove all barricades, warning signs, delineators, and flaggers in accordance with the MUTCD and 616 Traffic Control of these specifications.

(A) TRAFFIC FLOW RESTRICTIONS. On arterial streets the full roadway width shall be opened to traffic between the hours of 7:00 and 9:30 AM and between 4:00 and 6:30 PM, Monday through Friday, exclusive of legal holidays, and at all times when work is not actually in progress. Unless otherwise provided, during these restricted hours, work may be performed provided that the full roadway width remains opened to traffic. During other times traffic shall be maintained as directed. Traffic on streets other than arterials shall be maintained as directed. No materials nor equipment shall be placed or stored on city travelways when work is not actually in progress, unless specifically authorized.

If it becomes necessary to remove illegally parked or abandoned vehicles, the Contractor, with the assistance of a Metropolitan Police Department Officer, shall be responsible for moving any such vehicle at no expense to the District.

Pedestrian access to abutting properties, and vehicular access for ambulances, police, fire and other emergency equipment shall be maintained. When access is to be temporarily curtailed, the Contractor shall be responsible for giving adequate notice to the affected parties prior to blocking the access.

Whenever any street or highway or portion thereof is in acceptable condition for travel, it shall be opened to traffic subject to the approval by and at the direction of the Engineer. Such opening shall not be held to be in any way an acceptance of the roadway or any part of it or a waiver of any of the provisions of these specifications and contract.

Unless otherwise provided the Contractor shall bear all expenses of maintaining traffic over the section of road undergoing improvement without direct compensation. The Contractor shall give seventy two (72) hours prior notice to the District when major (phase) changes in traffic flow patterns are planned to be made.

(B) TRAFFIC CONTROL PLAN (TCP). The TCP for the project shall meet applicable requirements of the MUTCD and of these specifications, and shall be prepared so that the requirements of Traffic Control Restrictions as specified in the Contract documents are met. The TCP shall indicate the scheduling of construction where appropriate and shall show lane closures, means of channelizing traffic through the work areas, roadway closures and detours when specified in the Contract documents, and all

traffic control devices, such as warning signs, barricades, drums, cones, beacons, safety barriers with impact attenuators, including their sizes, locations and arrangements, all as required to perform the traffic control as specified.

When required to submit a TCP for approval, it will be submitted as a shop drawing in accordance with 105.02(B). In the event there is no TCP included in the Contract documents, the Contractor shall prepare and submit for approval a TCP meeting requirements herein, if required by the Contract. Payment for preparation, submittal, revising and resubmittal if necessary, of the TCP will be made as specified in 616.02(C).

When a TCP is included with the contract documents, the Contractor will not be required to prepare and submit a TCP. If the Contractor wishes to accept the TCP for use on the project, he shall so certify by letter to the Contracting Officer. If the Contractor does not wish to use the TCP in the Contract documents, he may submit for approval, prior to start of construction, his own TCP. All costs for preparation, submission, revising and resubmittal, if necessary, of this TCP will be borne by the Contractor. This Traffic Control Plan (TCP) shall:

- (1) Show in detail the placement of all signs, channelizing devices and crash attenuating devices for each phase of construction. The TCP shall be to the same scale as the contract drawing.
- (2) Contain an itemized summary for each phase of the type and quantity of all traffic control devices which will be needed for that phase.
- (3) Maintain equal or greater traffic flow capacity and lane widths as the suggested TCP.

Prior to Notice To Proceed, the Contractor may submit a conceptual TCP in lieu of a detailed TCP for preliminary approval. However, the detailed TCP shall be submitted and approved by the District prior to beginning the affected work.

(C) TRAFFIC CONTROLS

(1) GENERAL. All work dealing with traffic control shall be accomplished in accordance with these specifications, the approved TCP, and with the requirements of Part VI of the MUTCD.

All work shall be performed within times as specified in 104.02(A). The Contractor shall not work at nights, on weekends or holidays unless otherwise specified in the Contract documents or approved by the Engineer. Normal traffic flow shall be maintained during these times unless otherwise specified. The time required to implement and remove closures and install and remove traffic control devices shall be included within stated work times.

The Contractor shall coordinate his maintenance of traffic work with other contractors and utility companies working in the same general area to maintain continuity of traffic flow and minimize congestion.

Where directed, vehicular access to abutting properties shall be maintained. The Contractor shall furnish, place, maintain and remove when no longer required all materials, such as AC and/or soil materials, for temporary driveway and alley entrances, where shown in the Contract documents or where directed.

(2) TRAFFIC SAFETY OFFICER. For the duration of the project, the Contractor shall provide a traffic safety officer, who shall be responsible for the maintenance of traffic operations. The traffic safety officer shall meet the qualifications as specified in 616.02(B)(1).

(3) PEDESTRIAN CONTROL. The Contractor shall maintain the proper and safe flow of pedestrian traffic within and adjacent to the project area at all times. Access to abutting properties for pedestrians shall be maintained. The Contractor shall furnish, install, maintain and remove when no longer required the proper traffic control devices, including warning signs, to detour pedestrians when closing sidewalk to pedestrian traffic, where shown in the Contract documents or where directed. The Contractor shall furnish, place, maintain and remove when no longer required all materials for temporary pedestrian walkways, where shown in the Contract documents or where directed.

(4) LANE CLOSURES. When closing a lane to traffic, the Contractor shall furnish, install, maintain and remove when no longer required the necessary signs, channelizing devices such as traffic drums, Type II barricades or cones, and arrow boards, to effect lane closures and to separate lanes of traffic moving in opposite directions through the work area, as outlined in the TCP, Part VI of the MUTCD and these specifications.

Where shown in the Contract documents or where directed, the Contractor shall remove existing lane markings and shall install temporary lane markings, meeting requirements of 616.16 or 616.17, to delineate the temporary lanes as required. Temporary lane markings shall be covered over or removed when no longer required.

The Contractor shall furnish, place and relocate as required portable PCC safety barriers, meeting requirements of 614.02, to prevent the intrusion of errant vehicles into any excavated area deeper than 6 inches. Except when necessary to provide vehicular ingress and egress for the work area, open spaces between adjacent barrier sections shall not be permitted. The Contractor shall furnish and place at all approach ends of the PCC barriers, or at any other roadway obstruction caused by construction, suitable impact attenuators such as sand-filled modules, construction-zone GREATs or other approved impact attenuator devices. After the PCC or AC base has been placed in the excavated area or if the area is plated over, the Contractor shall remove the PCC barriers and impact attenuators.

During surfacing or resurfacing operations, PCC barriers shall not be used to protect the work area. Traffic shall be directed past the work area with traffic drums, cones or Type II barricades.

When specified in the Contract documents or when directed, the Contractor shall furnish, install, maintain and remove when no longer required lights, meeting requirements of 616.08, for placement with advance warning signs and upon barriers, drums and/or barricades.

When specified in the Contract documents or when directed, the Contractor shall provide flaggers, meeting requirements of 616.02(B)(2), to safely and expeditiously guide traffic through the work area.

The Contractor shall be required to replace all damaged traffic control devices. Traffic control devices damaged for any reason whatever shall be removed and repaired or replaced by the Contractor at no additional cost to the District.

(5) ROADWAY CLOSURES. When specified in the Contract documents, the Contractor shall furnish, place and remove when no longer required Type III PVC barricades for placement at each end of the length of roadway to be closed and the necessary signs to effect the proper detours around the closed

length of roadway.

104.03 VALUE ENGINEERING PROPOSALS BY CONTRACTOR

(A) GENERAL. This subsection will apply only when it is specifically included or designated in the contract documents. This provision describes the requirements for Value Engineering Change Proposals (VECP'S) which are initiated and developed by the Contractor to change the Contract Drawings and Specifications, or other requirements of a contract for the purpose of reducing the total cost of construction without reducing design capacity or quality of the finished product.

A VECP identical to one submitted under one contract, by the same or any other contractor, may also be submitted under a subsequent contract.

(B) VECP REQUIREMENTS. In order to be considered as a VECP, the Contractor at the time of submission to the Engineer, must identify the submission as a Value Engineering Proposal. The VECP must require a change to the contract, must decrease the contract price, and must maintain the finished product's required function such as service life, reliability, economy of operation, ease of maintenance, necessary standardized features and appearance, and not require an extension of contract time.

A VECP submission shall be of sufficient detail to clearly define the proposed change, including:

1. A description of the difference between the existing and the proposed contract requirements, and the comparative advantages and disadvantages of each;
2. Contract requirements recommended to be changed if the proposal is accepted;
3. A detailed estimate of the amount of the net savings, as defined in (E) herein, that will result from acceptance of the proposal;
4. A prediction of any effects the proposed change would have on the cost of maintenance and operation; and
5. A statement of the time by which the proposal must be accepted so as to obtain the maximum price reduction, noting any effect upon the contract time.

The following shall not be considered to be a VECP, but rather a change requested by the Contractor which will result in a reduction in the contract price by the full amount of the gross savings, including the Contractor's labor, material, equipment, overhead, profit and bond:

1. Changes resulting from a waiver of specification requirements.
2. Changes resulting from unavailability of specified materials.
3. Changes requested by the Contracting Officer.
4. Changes based solely on a change in deliverable end item quantities.

(C) VECP SUBMISSION WITHDRAWAL. The Contractor has the right to withdraw part or all of any VECP at any time prior to acceptance by the Contracting Officer. Such withdrawal shall be made in

writing to the Engineer. Each VECP submitted by the Contractor shall remain valid for a period of 60 days from date submitted. If the Contractor desires to withdraw the proposal prior to the expiration of this period, he may be liable for the cost incurred by the Engineer in reviewing the proposal.

(D) VECP ACCEPTANCE OR REJECTION. The Contracting Officer may accept or reject part or all of any VECP by giving the Contractor written notice thereof. Until such notice is issued, the Contractor shall remain obligated to perform in accordance with the terms of the contract. VECP'S will be processed expeditiously. However, the Contracting Officer shall not be liable for any delay in acting upon any proposal submitted pursuant to this section. The decision of the Contracting Officer as to acceptance of any such proposal shall be final and shall not be subject to GENERAL PROVISIONS, ARTICLE 7, DISPUTES.

(E) CONTRACT ADJUSTMENTS AND PAYMENTS. When a VECP submission is accepted:

(1) An adequate adjustment of the contract price and in any other affected provisions of the Contract shall be made and the contract modified in accordance with this section and GENERAL PROVISIONS, ARTICLE 3, CHANGES, or other applicable provision of the contract.

(2) The net savings resulting from the change shall be shared equally between the Contractor and the District. The Contractor's share will be paid as part of the next Partial Payment Estimate following the signed approval of a change order by the Contracting Officer in proportion to the amount of work completed under the VECP.

(3) Net savings shall be determined by deducting from the estimated gross savings, the Contractor's cost of developing and implementing the proposal and the estimated amount of increased costs to the District resulting from the change, such as implementation, inspection, increases in related items and District furnished equipment or property. Estimated gross saving shall include Contractor's labor, material, equipment, overhead and profit. Anticipated price adjustments for increases in the cost of fuel or material shall not be included as part of the estimated gross savings. The contract price shall be reduced by the sum of the District's costs and share of the net savings.

(4) The Contractor is entitled to share in instant contract savings only to the full extent provided for in this section. For purposes of sharing under (E)(1) above, the item "Instant Contract" shall not include any change orders or other modifications to this contract executed subsequent to acceptance of the particular VECP, by which the Contracting Officer increases the quantity of any item or adds any item.

(F) RESTRICTIONS ON USE. The Contractor may restrict the District's right to use any VECP data by marking it with the following statement:

- " The data, furnished pursuant to the Value Engineering section of the contract, shall not be duplicated, used nor disclosed, in whole or in part, for any purpose except to evaluate the VECP, unless the proposal is accepted by the Contracting Officer. This restriction does not limit the District's right to use information contained in this data if it is or has been obtained, or is otherwise available from the Contractor, or from another source, without limitations. When this proposal is accepted by the Contracting Officer, the District shall have the right to duplicate, use, and disclose any data in any matter and for any purpose whatsoever, and have others do so whether under this or any other District Contract."